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I. V79 CHINESE HAMSTER CELL INHIBITION OF METABOLIC COOPERATION (IMC) ASSAY

Several new chemicals were tested in an attempt to more fully understand the nature of activity in this assay. Two experiments[1,2] were completed using various doses of ethanol which, through personal communication with another investigator using this system, should not be active. Our data indicates that ethanol is weakly active, however variability precludes any definitive statement. This agent will not be retested if one of the other chemicals currently being examined prove to be a suitable negative.

An unknown pure chemical was submitted for testing. Due to its acid characteristics, the pH of the cell culture medium had to be adjusted using sodium hydroxide. Results were obtained which suggested that while the agent was slightly toxic to the V79 cells (about 25% killing at the 1-2 mg/ml doses), it did not block metabolic cooperation (*i.e.*, was negative).[3] Studies are currently underway to confirm and extend these results.

A second experiment was done using dry IT 2R1 CSC to confirm earlier findings.[4] As before, the condensate appeared weakly active (1.6 X background) at about 10 µg/ml.[2] The strong toxicity that was observed tended to compromise this conclusion. More tests with this CSC and at least one other condensate (LTF-5E; nitrogen-free filler) are planned to determine if the pattern of weak activity and high toxicity are a common characteristic of CSCs in this assay.

II. L5178Y TRIFLUOROTHYMIDINE RESISTANCE ASSAY[3]

A new microsomal (S9) preparation has been tested and found to be satisfactory for our needs. A memo detailing these results has been written. As indicated previously,[5] no further investigations are planned with this assay due to the increased effort with the IMC system.

III. REFERENCES

1. Penn, J. M. Notebook No. 7866, pp. 29-36.
2. Penn, J. M. Notebook No. 7866, pp. 66-69.
3. Ayers, D. J. Notebook No. 7839, p. 75.
4. Penn, J. M. Notebook No. 7773, pp. 149-156.
5. McCuen, R. W. 6904 Monthly progress report. Monthly Progress Report 83-031. 1983 February 15.

R.W. McCuen

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